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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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10/607,724

06/27/2003

Gregory A. Peek

42P16079

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09/09/2004

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

A, MINH D

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/607,724 | PEEK, GREGORY A. | |
| | Examiner | Art Unit | |
| | Minh D A | 2821 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11, 13-19, 23-24 are rejected under 35 U.S.C. 102(b) as being unpatentable by Jovanovich et al (US 6,005,530).

Regarding claim 1, Jovanovich discloses a switched gain antenna comprising a primary antenna (16) having a gain and a secondary antenna (18_{1-n}) having a gain greater than the gain of the primary antenna (16). See figure 3, col.3, lines 40-56.

Regarding claims 2-3, Jovanovich discloses wherein the gain of the secondary antenna (18_{1-n}) is at least about 6 dB or at least about 12 dB. See figure 3, since each (18) is 5 dB.

Regarding claims 4-5, Jovanovich discloses wherein the gain of the primary antenna (16 has a 2.5 dB) is less than about 6 dB or less than 3 dB. See figure 3.

Regarding claims 6-7, Jovanovich discloses wherein the primary antenna (16) is a dipole antenna and the secondary antenna is a dipole antenna. See col.3, lines 5-38.

Regarding claim 8, Jovanovich discloses wherein the primary antenna (16) is a dipole antenna. See col.3, lines 5-38.

Regarding claim 9, Jovanovich discloses wherein the primary antenna (16) is a transmit and receive antenna and the secondary antenna is a receive only antenna. See figures 3-5, regarding a switches (26 and 28 for operation transmit and receive).

Regarding claims 10-11, Jovanovich inherently discloses comprising a power amplifier (PA) having an output terminal coupled to the primary antenna via a switch and wherein the power amplifier has an output power of at least about 17 dBm. See col.3, lines 1-18, a power output from transceivers of 17.9 dBm.

Regarding claim 13, Jovanovich discloses comprising a first antenna (16) adapted to at least transmit signals; and a diversity antenna (18) adapted to only receive signals and having a gain greater than a gain of the first antenna. See figure 3, col.3, lines 40-68 to col.4, lines 1-43.

Regarding claims 14-15, Jovanovich discloses wherein the gain of the diversity antenna is at least about 6 dBi or the gain of the first antenna is less than about 6 dBi. See figure 3, antenna (16 has a 2.5 dB) is less than about 6 dB or less than 3 dB.

Regarding claim 16, Jovanovich discloses a wireless local area network (WLAN) device comprising: a primary antenna (16) having a gain; and a secondary antenna (18) having a gain greater than the gain of the primary antenna (16). See figure 3, col.3, lines 40-68 to col.4, lines 1-43.

Regarding claim 17, Jovanovich discloses wherein the WLAN device is an access point. See col.1, lines 13-31.

Regarding claim 18, Jovanovich discloses wherein the secondary antenna (18) has a gain of at least about 6 dBi and the primary antenna has a gain of less than about 6 db. See figure 3, since each (18) is 5 dB and (16) has a 2.5 dB.

Regarding claim 19, Jovanovich discloses switched gain antenna comprising receiving a first signal from a primary antenna', and receiving a second signal from a diversity antenna, wherein the diversity antenna has a gain greater than a gain of the primary antenna. See figure 3, col.3, lines 40-68 to col.4, lines 1-43.

Regarding claim 23, Jovanovich discloses switched gain antenna comprising: switches (26 and 28) for selectively switching between either a primary antenna (16) or a diversity antenna (18) to receive signals, wherein a gain of the primary antenna (16) is less than a gain of the diversity antenna (18). See figure 3, col.3, lines 40-68 to col.4, lines 1-43.

Regarding claim 24, Jovanovich discloses a switched antenna comprising transmitting a signal using the primary antenna (16). See figure 3.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 12, 20-22, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Jovanovich et al (US 6,005,530) in view of Tanishima et al (US 6,175,747).

Regarding claims 12, 20-22 and 25, Jovanovich discloses the claimed invention except for a low noise amplifier (LNA) having an input terminal selectively coupled to either the primary antenna or the secondary antenna and power amplifier (PA) to the primary antenna. However, Tanishima discloses a low noise amplifier (LNA) (elements (42)) having an input terminal selectively coupled to either the primary antenna or the secondary antenna and power amplifier (PA) (COMP.AMP (1 and 2)) to the primary antenna. See figures 5-6, col.8, lines 19-68 to col.9, lines 1-50.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ a low noise amplifier and a power amplifier such as that suggested by Tanishima in the system of antenna of Jovanovich to reduce the noise and a lower power watt.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benjamin et al (US 6,415,140) and Talwar. (US 5,117,505) are cited to show a diversity antenna.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

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If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

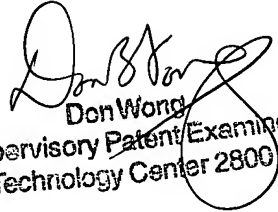
Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

Examiner

Minh A

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8/26/04


Don Wong
Supervisory Patent Examiner
Technology Center 2800